

KEARNY MARSH SEDIMENT ABOVE AQUABLOK CAP SHOWS INCREASED BACTERIAL DIVERSITY

Glenn, Marian; **Ferreira**, Michael; **Ramilo**, Jaime; **Rauch-Sasseen**, Anna; **Bentivegna**, Carolyn
Department of Biological Sciences, Seton Hall University, South Orange, NJ

Single Strand Conformational Polymorphism (SSCP) of 16s rDNA was used to compare bacterial diversity in, above, and below a layer of Aquablok. Aquablok is a clay-based capping technology deployed over contaminated sediment in experimental plots in Kearny Marsh, Kearny, NJ. Preliminary results, based on cores taken from two sites, showed that 16s rDNA amplified from DNA extracted from sediment on top of Aquablok produced the greatest number of SSCP bands, followed by the Aquablok itself. Sediment below the cap appeared least diverse. Bacterial diversity in Aquablok amended with 2% peat moss was not different from that in Aquablok by itself. Data suggest that active capping technologies such as Aquablok promote creation of more bacterial niches than Kearny Marsh sediment alone.